

United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/778,228	02/06/2001	Jonathan N. Howarth	SU-7155-A	5749
75	90 09/16/2002			
PIPPENGER, PHILIP M. ALBEMARLE CORPORATION 451 FLORIDA BLVD.			EXAMINER	
			LEVY, NEIL S	
BATON ROUGE, LA 70801			ART UNIT	PAPER NUMBER
			1616	100
			DATE MAILED: 09/16/2002	14

Please find below and/or attached an Office communication concerning this application or proceeding.

### Communication Summary Examiner Communication Summary Examiner Communication Summary Communication Summary Communication Summary Communication Summary Communication Summary Communication Summary Communication Com	$\sim 3.1 \rm M_{\odot}$	cation-No. 22 Applicant(s) How ARMedul
P ri d for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE	Office Action Summary / Exam	iner ADL COUP IGG Group Art Unit 14
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE	—The MAILING DATE of this communication appears on the	e cover sheet beneath the correspondence address—
OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.138(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the maining date of this communication. - If the period for reply specified above such period days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If the period for reply specified above such period for reply will, exprise 3X(6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Status - Freeponsive to communication(s) filled on -	P ri d for Reply	7
from the mailing date of this communication. If the period for reply specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication. Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Status This action is FINAL. Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213. Disp sition of Claims Claim(s) Cl		REMONTH(S) FROM THE MAILING DATE
This action is FINAL. Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 1 1; 453 O.G. 213. Disp sition of Claims Claim(s)	from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within - If NO period for reply is specified above, such period shall, by default, expire Si	the statutory minimum of thirty (30) days will be considered timely. X (6) MONTHS from the mailing date of this communication .
Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 1 1; 453 O.G. 213. Disp sition of Claims Claim(s)	Status — /////	
Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 1 1; 453 O.G. 213. Disp sition of Claims Claim(s)	Responsive to communication(s) filed on	
Disp sition of Claims Claim(s)	This action is FINAL.	
Claim(s)		
Of the above claim(s)	Disp sition of Claims	
Of the above claim(s)	Claim(s)	is/are pending in the application.
Claim(s)		is/are withdrawn from consideration.
Claim(s)	• •	is/are allowed.
Claim(s)	1—(17)	·
Application Papers See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948. The proposed drawing correction, filed on	0 , ,	·
Application Papers See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948. The proposed drawing correction, filed on	4 (1)	•
Application Papers See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948. The proposed drawing correction, filed on	Claim(s) /	
The proposed drawing correction, filed on	Application Papers	
☐ The drawing(s) filed on	☐ See the attached Notice of Draftsperson's Patent Drawing Review	v, PTO-948.
The specification is objected to by the Examiner. The oath or declaration is objected to by the Examiner. Pri rity under 35 U.S.C. § 119 (a)-(d) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 11 9(a)-(d). All Some* None of the CERTIFIED copies of the priority documents have been received. received in Application No. (Series Code/Serial Number) received in this national stage application from the International Bureau (PCT Rule 1 7.2(a)). *Certified copies not received: Attachment(s) *Motice of Referenc (s) Cited, PTO-892 □ Notice of Informal Patent Application, PTO-152	☐ The proposed drawing correction, filed on is	s 🗆 approved 🗀 disapproved.
The oath or declaration is objected to by the Examiner. Pri rity under 35 U.S.C. § 119 (a)-(d) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 11 9(a)-(d). All □ Some* □ None of the CERTIFIED copies of the priority documents have been □ received. □ received in Application No. (Series Code/Serial Number) □ received in this national stage application from the International Bureau (PCT Rule 1 7.2(a)). *Certified copies not received: □ . Attachment(s) Attachment(s) □ Notice of Informal Patent Application, PTO-152	☐ The drawing(s) filed on is/are objected to by	the Examiner.
Pri rity under 35 U.S.C. § 119 (a)-(d) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 11 9(a)-(d). All Some* None of the CERTIFIED copies of the priority documents have been received. received in Application No. (Series Code/Serial Number) received in this national stage application from the International Bureau (PCT Rule 1 7.2(a)). *Certified copies not received: Attachment(s) Information Disclosure Statement(s), PTO-1449, Paper No(s) Notice of Referenc (s) Cited, PTO-892	☐ The specification is objected to by the Examiner.	
□ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 11 9(a)-(d). □ All □ Some* □ None of the CERTIFIED copies of the priority documents have been □ received. □ received in Application No. (Series Code/Serial Number) □ received in this national stage application from the International Bureau (PCT Rule 1 7.2(a)). *Certified copies not received: □ Attachment(s) □ Information Disclosure Statement(s), PTO-1449, Paper No(s) □ Interview Summary, PTO-413 □ Notice of Referenc (s) Cited, PTO-892 □ Notice of Informal Patent Application, PTO-152	☐ The oath or declaration is objected to by the Examiner.	
□ All □ Some* □ None of the CERTIFIED copies of the priority documents have been □ received. □ received in Application No. (Series Code/Serial Number) □ received in this national stage application from the International Bureau (PCT Rule 1 7.2(a)). *Certified copies not received: □ Attachment(s) * Information Disclosure Statement(s), PTO-1449, Paper No(s) □ Interview Summary, PTO-413 □ Notice of Referenc (s) Cited, PTO-892 □ Notice of Informal Patent Application, PTO-152	Pri rity under 35 U.S.C. § 119 (a)-(d)	
Attachment(s) Information Disclosure Statement(s), PTO-1449, Paper No(s) Notice of Referenc (s) Cited, PTO-892 Attachment(s) Interview Summary, PTO-413 Notice of Informal Patent Application, PTO-152	 ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the prior ☐ received. ☐ received in Application No. (Series Code/Serial Number) 	rity documents have been
Attachment(s) Information Disclosure Statement(s), PTO-1449, Paper No(s) Notice of Referenc (s) Cited, PTO-892 Attachment(s) Interview Summary, PTO-413 Notice of Informal Patent Application, PTO-152	*Certified copies not received:	·
Notice of Referenc (s) Cited, PTO-892 Notice of Informal Patent Application, PTO-152	· ·	
Notice of Referenc (s) Cited, PTO-892 Notice of Informal Patent Application, PTO-152	Synformation Disclosure Statement(s), PTO-1449, Paper No(s)	D/U// //// □ Interview Summary, PTO-413
	Notice of Referenc (s) Cited PTO-892	□ Notice of Informal Patent Application, PTO-152
		• •
Office Action Summary	·	

U. S. Patent and Trademark Office PTO-326 (Rev. 9-97)

Part of Paper No.

Art Unit: 1616

Receipt is acknowledged of Declaration, IDS (4/13/01), CFR, IDS (9/11/01), CFR (9/24/01) and 6 more IDS's of 10/18/01 through 7/16/02, respectively. Note drawings are informal. Any references not initialed were either not available to examiner or not identifiable as to date. Please provide,

Questions of possible double patenting arise: co-pending 09/484,891, 09/484687, 484,844, 484891, and 487816 at least, appear to have article claims, whether or not requiring a label, and would be seen as at least obvious, please provide claims of these and any other co-pending applications/patents, to articles.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claim 7 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Please spell out abbreviations at first occurrence; outworlders may not recognize Elemental Particles Association.

Claims 1-4 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to

Art Unit: 1616

ر است

make and/or use the invention. Claims 4, and 31 state a label must state compounds, claimed as essential, as the active, must <u>actually</u> be present. This leads to utter consternation—have claims 1-30 intended to prophetic pronouncement, with no active hydantoins actually required to be present? The language casts dispersion not only on the presence, or absence of any of the recited species of hydantoins, or ratios and concentrations thereof, but also on the intended meaning of "consisting essentially of" – please explain the latter, or amend, as in consisting of, so we know what is in the package.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 1616

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-7, 11-17, 19-21, 23-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Bottom et al 4597941.

DBDMH and either DCDMH or TCICA, and an inactive, dye, are known (column 5, bottom-column 6) and constitute an article as package, a container, with solid or liquid, including a dye and other inactive—cleaner—with a single disinfectant (column 4, line 42-55). Solid soap with dye, thus, the soap containing binder (line 30-32/column 5) are utilized. The DBDMH is shown as 100% delivery of hypohalite concentration can be adjusted to provide 2-15 ppm (column 8, top). pH can be adjusted to maintain pH of 6-9 (Table III), no patentable weight is given to future intended use of the article (wastewater, brewery, etc—as at claim 16). No patentable weight is given to the attachment of written stickers and/or labels.

Claims 1-7, 11-13, 16-19, 25-33, 36-40 are rejected under 35 U.S.C. 102(b) as being anticipated by White et al 4119535.

Articles—water treatment dispensers—of DBDHI with no inactive binders (unspecified in instant claims) in solid form are shown (column 5) pH is maintained at about 7.9-7.4 (column 8). Additional compatible inactives (claim 2) are shown, as are additional actives, (TCC or NaDcc (column 9, lines 4-15). Additional hydantoins include dibromo ethylmethyl and the dibromomethyl isobutyl forms (column 7, bottom). No patentable weight is given to future intended use, or to attachment of a label or sticker or to what is printed on the label or sticker.

Art Unit: 1616

Claims 1-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over White et al 4119535 in view of Bottom et al 4597941 and Girard—4537697 and EPA-CFR 40.

White (above) provide the essence of the instant invention, no regard of patentable weight given to labeling, but do not show the combination of DBDMH with the isopropyl, isobutyl or methyl ethyl dibromo hydantoins. However, such combination is implied, as these other forms are shown as employable given acceptance of less preferable dibromo- (column 7, lines 53-line 4, column 8). Bottom (above) also alluded to combinations, but showed only that of cyanuric acid with hydantoins, and focused on pH requirements for color stability. Girard however, discloses the instant halogenated hydantoins (column 1, lines 16-line 8, column 2) in the various claimed water treatment environments, inclusive of those of White and Bottom, and address the solid compaction problem (column 3) solvable with Mg oxide or with DMH, DEH or MEH (bottom, column 3) Example 9 shows 97.5% DBMH with the non-active Mg oxide. 40 CFR shows labels, with the instantly claimed descriptive generalizations, are required.

The primary reference discloses the essence of the instant invention as claimed, but does not specify each and every element of the instantly claimed methods and compositions. However the secondary references directed at the similar same methods and compositions to solve the same problems of the primary reference do provide these additional elements.

It would have been obvious to a person or ordinary skill in the art at the time the invention was made desiring to provide a biocidal water treatment article, to use that of

Art Unit: 1616

<u>White</u>, because it is effective and well recognized in the water treatment arts, permitting stable compositions, modifications, by addition of added active or inactive, is shown advantageous by <u>White</u>, in terms of cost, Br availability, product availability and by bottom, to stabilize added color, and by <u>Girard</u> to enhance solubility.

There is no non-obvious and/or unexpected results obtained since the prior art is well aware of the use of dibromo-hydantoins and the use of additives for the functionality for which they are known to be used is not a basis for patentability. The selection of active is a result effective parameter determinable by artisan as desired.

Applicant has not provided any objective evidence of criticality, non-obvious or unexpected results that the administration of the particular ingredients', concentrations, forms or labels provides any greater or different level of prior art expectation as claimed.

Claims 25, 39 and 40 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 22-36 of copending Application No. 09/484938. Although the conflicting claims are not identical, they are not patentably distinct from each other because although the instant methods are nominal, they do overlap the methods of 484938.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11

Art Unit: 1616

F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-24, drawn to an article of dibromo hydantoin active, classified in class \$74, subclass \$389.
- II. Claims 36-38, drawn to an article of non-hydantoin form, classified in class 252 subclass/75
- .III. Claims 25, 39 and 40 are, drawn to methods, classified in class 424, subclass 405.

The inventions are distinct, each from the other because:

Inventions of Groups I, II and III are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially

Art Unit: 1616

different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the methods of Group III can be practiced with materially different products such as H_2O_2 .

Group I, II, III have attained recognition in the art as separate subject for inventive effort as evidenced by their separate classification. Separate classification is also evidenced of the different field of search that would be required to search each invention. Therefore, the inventions outlined above are distinct. This, in addition to the fact that a search and examination of the entire application would place an undue burden on the Examiner, render the present restriction requirement proper for examination purposes.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

This application contains claims directed to the following patentably distinct species of the claimed invention: species at active hydantoins; single or mix.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claims 1-8, 11-24, 26-33, 36 are generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims

Art Unit: 1616

717 CONTROL 14011 DOI: 0077 7 0,22

readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

This application contains claims directed to the following patentably distinct species of the claimed invention: species of active non-hydantoin: hpochlorite, cyanurate.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claims 16-24, 26-38 are generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims

Art Unit: 1616

readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Neil Levy whose telephone number is 308-2412. The examiner can normally be reached on Tuesday- Friday 7:00 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jose Dees can be reached on 308-4628. The fax phone numbers for the organization where this application or proceeding is assigned are 305-4556 for regular communications and 305-3592 for After Final communications.

Art Unit: 1616

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 308-1235.

Levy:mv September 9, 2002

NEIL S. LEVY
PRIMARY EXAMINER